## APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-50
HOPE CREEK GENERATING STATION

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
DOCKET NO. 50-354

(NONRADIOLOGICAL)

# HOPE CREEK GENERATING STATION ENVIRONMENTAL PROTECTION PLAN (NONRADIOLOGICAL)

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1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of nonradiological environmental values during operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the facility is operated in an environmentally acceptable manner, as established by the Final Environmental Statement - Operating Licensing Stage (FES-OL) and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal. State and local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES-OL which relate to water quality matters are regulated by way of the licensee's NPDES permit.

### 2.0 Environmental Protection Issues

In the FES-OL dated December 1984, the staff considered the environmental impacts associated with the operation of the Hope Creek Generating Station. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment.

## 2.1 Aquatic/Water Quality Issues

Consumptive surface water use by Hope Creek during periods of river flow below  $85 \text{ m}^3/\text{s}$  (3,000 ft<sup>3</sup>/s), as measured at Trenton, New Jersey, is to be compensated for under a ruling of the Delaware River Basin Commission (DRBC). The applicant is participating in the development of a supplementary reservoir for this purpose. (FES Section 4.2.3.2 and 5.3.1.1). The NRC will defer to the DRBC for any further actions regarding flow compensation.

#### 2.2 Terrestrial Issues

The primary potential effect of station operation on terrestrial resources derives from cooling tower drift. Significant impacts on terrestrial resources will likely not occur if the cooling tower functions properly

and is adequately maintained. To ensure proper cooling tower operation, the need to measure drift rates and deposition on native vegetation was identified by the staff (FES Section 5.14.1). Accordingly, the applicant will implement a Salt Drift Monitoring Program as discussed in Section 4.2.2 of this Plan.

- 3.0 Consistency Requirements
- 3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such activities do not involve an unreviewed environmental question and do not involve a change in the EPP\*. Changes in station design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this Section.

Before engaging in additional construction or operational activities which may significantly affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. Activities are excluded from this requirement if all measurable nonradiological environmental effects are confined to the on-site areas previously disturbed during site preparation and plant construction. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activity and obtain prior NRC approval. When such activity involves a change in the EPP, such activity and change to the EPP may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3 of this EPP.

<sup>\*</sup> This provision does not relieve the licensee of the requirements of 10 CFR 50.59.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns: (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the FES-OL, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensino Board; or (2) a significant change in effluents or power level; or (3) a matter, not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include written evaluations which provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question or constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of the Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

3.2 Reporting Related to the NIPDES Permit and State Certification

Changes to, or renewals of, the NJPDES Permits or the State certification shall be renorted to the MPC within 3C days following the date the change or renewal is approved. If a permit or certification, in part or in its entirety, is appealed and staved, the NRC shall be notified within 30 days following the date the stay is granted.

The licensee shall notify the NRC of changes to the effective NJPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the NJPDES Permit at the same time the application is submitted to the permitting agency.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, and local environmental regulations are not subject to the requirements of Section 3.1.

- 4.0 Environmental Conditions
- 4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and reported to the NRC within 24 hours followed by a written report per Subsection 5.4.2. The following are examples: excessive bird impaction events; onsite plant or animal disease outbreaks; mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973; fish kills; increase in nuisance organisms or conditions; and unanticipated or emergency discharge of waste water or chemical substances.

No routine monitoring programs are required to implement this condition.

- 4.2 Environmental Monitoring
- 4.2.1 Aquatic Monitoring

The certifications and permits required under the Clean Water Act provide mechanisms for protecting water quality and, indirectly, aquatic biota.

The NRC will rely on the decisions made by the State of New Jersey under the authority of the Clean Water Act for any requirements for aquatic monitoring.

### 4.2.2 Terrestrial Ecology Monitoring

The applicant will implement the Salt Drift Monitoring Program to assess the impacts of cooling tower salt drift on the environment in the HCGS vicinity provided to NRC by letter dated March 28, 1984 from Robert L. Mittl, Public Service Electric & Gas Co., to A. Schwencer, U.S. Nuclear Regulatory Commission.

The monitorino program shall commence one year prior to the onset of commercial operation of the HCGS and include low-power testing and operational data up to three years from receipt of license or until such earlier time that the licensee can demonstrate that the objectives of the study have been fulfilled. Annual monitoring reports shall be submitted to the NRC for review.

The licensee may make changes in the salt drift monitoring procedures without prior Commission approval unless the proposed change affects the program objectives described in the introduction to the Salt Drift Monitoring Program. Changes in the procedures, for example, changes which affect sampling frequency, location, gear, or replication, shall be recorded. Records shall describe the changes made, the reasons for making the changes, and a statement showing how continuity of the study will be affected. Any modifications or changes of the monitoring program, once initiated, shall be governed by the need to maintain consistency with previously used procedures so that direct comparisons of data are technically valid. Such modifications or changes shall be justified and

supported by adequate comparative sampling programs or studies demonstrating the comparability of results or which provide a basis for making adjustments that would permit direct comparisons. The annual report should describe monitoring procedures and changes in such procedures made during the report period.

- 5.0 Administrative Procedures
- 5.1 Review

The licensee shall provide for review of compliance with the EPP. The review shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organization structure utilized to achieve the independent review function and results of the review activities shall be maintained and made available for inspection.

#### 5.2 Records Retention

Records and logs relative to the environmental aspects of station operation shall be made and retained in a manner convenient for review and inspection.

These records and logs shall be made available to NRC on request.

Records of modifications to station structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the station. All other records, data and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

5.3 Changes in Environmental Protection Plan

Requests for changes in the EPP shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the EPP.

- 5.4 Plant Reporting Requirements
- 5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following issuance of the operating license.

The report shall include summaries and analyses of the results of the environmental protection activities required by Subsection 4.2 of this EPP for the report period, including a comparison with related preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of trends toward irreversible damage to the environment are observed, the licensee shall provide a detailed analysis of the data and a proposed course of mitigating action.

The Annual Environmental Operating Report shall also include:

- A list of EPP noncompliances and the corrective actions taken to remedy them.
- (2) A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 which involved a potentially significant unreviewed environmental question.
- (3) A list of nonroutine reports submitted in accordance with Subsection 5.4.2.

In the event that some results are not available by the report due date, the report shall be submitted noting and explaining the missing results. The missing results shall be submitted as soon as possible in a supplementary report.

#### 5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC within 30 days of occurrence of a nonroutine event. The report shall: (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact, and plant operating characteristics; (b) describe the probable cause of the event; (c) indicate the action taken to correct the reported event; (d) indicate the corrective

action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems; and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided with a copy of such report at the same time it is submitted to the other agency.